PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference										
71164PC/RO	FOR FURTHER ACTION See Form PCT/IPEA/416									
International application No.	International filing date (day/month/year)	Priority date (day/month/year)								
PCT/SE 2002/002207	29.11.2002 23.01.2002									
International Patent Classification (IPC) of	or national classification and IPC									
E21B 4/14 // B25D 9/26										
Applicant										
ATLAS COPCO SECOROC AB et al										
This report is the international pre	eliminary examination report, established by t	his International Preliminary Examining								
	ansmitted to the applicant according to Article									
This REPORT consists of a total of a to	of 3 sheets, including this cov	er sheet.								
 This report is also accompanied by 	y ANNEXES, comprising:									
a. (sent to the applicant	and to the International Bureau) a total of	sheets, as follows:								
	-	we been amended and are the basis of this report								
and/or sheets	containing rectifications authorized by this A re Instructions).	uthority (see Rule 70.16 and Section 607 of the								
sheets which	supersede earlier sheets, but which this Autho	ority considers contain an amendment that goes								
beyond the dis Supplemental	sclosure in the international application as file	ed, as indicated in item 4 of Box No. I and the								
b. (sent to the Internatio	nal Bureau only) a total of (indicate type and	number of electronic carrier(s))								
·	, containing a sequence listing	g and/or tables related thereto, in computer								
readable form only, as Administrative Instruc	s indicated in the Supplemental Box Relating ctions).	to Sequence Listing (see Section 802 of the								
4. This report contains indications re	lating to the following items:									
Box No. I Basis of	the report									
Box No. II Priority										
Box No. III Non-est	ablishment of opinion with regard to novelty,	inventive step and industrial applicability								
Box No. IV Lack of	unity of invention									
Box No. V Reasone applicab	ed statement under Article 35(2) with regard to bility; citations and explanations supporting suppo	o novelty, inventive step or industrial								
	documents cited									
Box No. VII Certain	defects in the international application									
Box No. VIII Certain	observations on the international application									
Date of submission of the demand	Date of completion	of this report								
	Date of completion	of this report								
25.07.2003	29.01.2004	,								
·		Authorized officer								
Name and mailing address of the IPEA/SE Patent- och registreringsverket	Authorized officer	·								
Box 5055										
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	Form PCT/IPEA/409 (cover sheet) (January 2004)									

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Internal application No.
PCT/SE 2002/002207

Вох	No. I	Ва	asis of the report				
1.			o the language, this report is based on the international application in the language in which it was filed, unless cated under this item.				
	\boxtimes		is report is based on a translation from the original language into the following language <u>English</u> , ich is the language of a translation furnished for the purposes of:				
			international search (under Rules 12.3 and 23.1(b))				
		$\overline{\boxtimes}$	publication of the international application (under Rule 12.4)				
			international preliminary examination (under Rules 55.2 and/or 55.3)				
2.	furnish	ned to the e not an	gard to the elements of the international application, this report is based on (replacement sheets which have been to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" not annexed to this report):				
	\bowtie		ernational application as originally filed/furnished				
		the des	scription:				
		pages	as originally filed/furnished				
		pages* pages*					
	Ш	the cla	and a substantial field of the substantial fie				
		pages*					
		pages*					
		pages*					
		the dra	awings:				
		pages	as originally filed/furnished				
		pages*	received by this Authority on				
		pages*	received by this Authority on				
		a seque	ence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.				
3.		The an	nendments have resulted in the cancellation of:				
			the description, pages				
			the claims, Nos.				
		$\overline{\Box}$	the drawings, sheets/figs				
		同	the sequence listing (specify):				
		\sqcap	any table(s) related to the sequence listing (specify):				
4.	This report has been established as if (some of) the amendments annexed to this report and listed below had no made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box 70.2(c)).						
			the description, pages				
		Ħ	the claims, Nos.				
		Ħ	the drawings, sheets/figs				
		\vdash					
		H	the sequence listing (specify):				
		لــا	any table(s) related to the sequence listing (specify):				
*	If item	4 applie	es, some or all of those sheets may be marked "superseded."				

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Interlated application No.
PCT/SE 2002/002207

Box	k No. V	Reasoned statement u citations and explanat	nder Article 3 ions supporti	5(2) with regard to novelty, inventive step ag such statement	or industrial applicability;
1.	Statement				
Novelty (N)		ty (N)	Claims	1-9	YES
			Claims		NO NO
	Invent	tive step (IS)	Claims	1 0	YES
	mven	live step (13)	Claims	1-9	NO NO
	Indust	trial applicability (IA)	Claims	1-9	YES
			Claims		NO

2. Citations and explanations (Rule 70.7)

Documents cited in the International Search Report:

D1: GB 1419981 A
D2: US 5277260 A
D3: US 4102534 A
D4: US 4821812 A

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The cited documents represent the general state of the art. The invention defined in claims 1-9 is not disclosed by any of these documents.

The cited prior art does not give any indication that would lead a person skilled in the art to the claimed compressed air percussive mechanism for a down hole hammer and down hole hammer. Therefore, the claimed invention is not obvious to a person skilled in the art.

Accordingly, the invention defined in claims 1-9 is novel and is considered to involve an inventive step. The invention is industrially applicable.